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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,832	02/24/2004	Masatomo Yamada	051626-5011	2097
9629	7590	02/22/2006	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			WALSH, RYAN D	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/784,832	Applicant(s) YAMADA, MASATOMO	
	Examiner Ryan D. Walsh	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5, 9 and 13-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 and 10-12 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 7 is objected to because of the following informalities: The phrase, “of a line that passes passes through the center” should be changed to –of a line that passes through the center”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

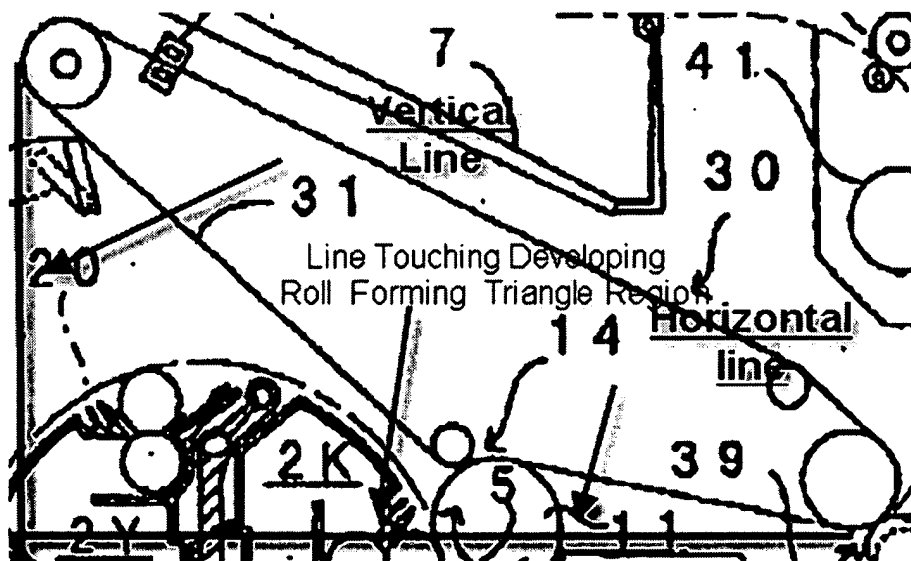
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US Pat. #. 6,766,124).

Regarding claim 1, Taguchi et al. teach, “An image forming apparatus comprising: an image carrier (11) which has a predetermined center of rotation and on which a toner image is formed by developing an electrostatic latent image formed thereon with a toner; a developing device (20) which has a developing roll that is opposite the image carrier, and rotates while carrying a toner on the surface thereof and that conveys the toner to a developing position at which the electrostatic latent image on the image carrier is developed by the toner; an intermediate transfer member (30) which is disposed in an approximately flat shape and circulatingly moves, onto which the toner

image on the image carrier is primarily transferred at a predetermined transfer position (14), and which has a second transfer position (39) at which the toner image is secondarily transferred onto a transfer material (4); and a fixing unit (40) which fixes the toner image on the transfer material, which has undergone the transfer of the toner image, thereon at a predetermined fixing position, wherein both the image carrier (11) and the developing roll (20) are disposed in a triangle region formed by the approximately flat-shaped intermediate transfer member, a vertical line in contact with the intermediate transfer member, and a horizontal line in contact with the intermediate transfer member (Fig. 1)."



Regarding claim 2, Taguchi et al. teach, "comprising a rotary developing device (20) that has a plurality of developing units (2k, 2m, 2c, 2y), which are disposed about a

predetermined center of rotation thereof, and in which respective color toners are accommodated, and develops an electrostatic latent image formed on the image carrier by a developing unit which is faced to the image carrier by the rotation of the rotary developing device, wherein the developing roll is a developing roll that constitutes a developing unit used in the development executed this time of the plurality of developing units constituting the rotary developing device.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi et al. (US Pat. #. 6,766,124) in view of Shin (US Pat. # 6,895,204).

Regarding claim 4, Taguchi et al. do not teach teach, “a first support roll that supports the intermediate transfer member from the inside thereof at the secondary transfer position; and a second support roll that supports the intermediate transfer member from the inside thereof at a position on the upstream side of the secondary transfer position in a moving direction of the intermediate transfer member and forms a short side of the approximately flat-shaped intermediate transfer member which extends upstream of a transfer material conveying direction in cooperation with the first support roll.” However, Shin teaches, “a first support roll (Fig. 2, ref. # 42) that supports the intermediate transfer member from the inside thereof at the secondary transfer position;

and a second support roll (26b) that supports the intermediate transfer member from the inside thereof at a position on the upstream side of the secondary transfer position in a moving direction of the intermediate transfer member and forms a short side of the approximately flat-shaped intermediate transfer member which extends upstream of a transfer material conveying direction in cooperation with the first support roll." Regarding the remainder of claim 4, Taguchi et al teaches, "wherein the image carrier (11) is disposed so as to come into contact with a long side portion of the intermediate transfer member along which the intermediate transfer member moves in a direction in which the intermediate transfer member approaches the second support roll (would be near ref. # 39) at approximately the center of the long side portion over a predetermined region of the intermediate transfer member in the moving direction thereof (Fig. 1)."

It would have been obvious to one skilled in the art at the time the invention was made to modify Taguchi et al. invention to include a first support roll that supports the intermediate transfer member from the inside thereof at the secondary transfer position; and a second support roll that supports the intermediate transfer member from the inside thereof at a position on the upstream side of the secondary transfer position in a moving direction of the intermediate transfer member and forms a short side of the approximately flat-shaped intermediate transfer member which extends upstream of a transfer material conveying direction in cooperation with the first support roll.

The ordinary artisan would have been motivated to modify Taguchi et al. invention in a manner described above for at least the purpose of enabling a tighter transfer belt to reduce the chance of wrinkles on the belt.

Allowable Subject Matter

Claims 6-8 and 10-12 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 6 and 7, the prior art does not teach or suggest the claimed, "secondary transfer position is disposed upstream, with respect to the transfer material conveying direction, of a horizontal line that pass through the center of rotation of the image carrier."

Regarding claim 8, the prior art does not teach or suggest the claimed, "image carrier is disposed at a position at which the image carrier is in contact with the approximately flat-shaped intermediate transfer member on the side thereof where the intermediate transfer member moves in a direction in which the intermediate transfer member approaches the secondary transfer position as well as the image carrier is disposed downstream of a first straight line which is approximately vertical to a direction, in which the partial conveying path extends, of a horizontal line and a vertical line that are in contact with a portion of the intermediate transfer member on the most upstream side thereof with respect to a transfer material conveying direction"

Response to Arguments

Applicant's arguments filed January 26, 2006 have been fully considered but they are not persuasive. The amendment of claim 1, "a developing device which has a developing roll that is opposite the image carrier, and rotates" does not distinguish over the cited prior art of Taguchi et al. (US Pat. # 6,766,124). As clearly shown in Figure 1,

the developing device (20) is disposed as a developing roll, and is 'opposite' the image carrier (11). The developing device (20) transfers color toner to the image carrier (11) by rotation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

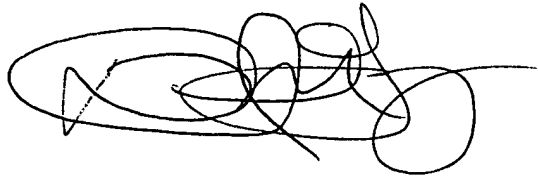
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Walsh whose telephone number is 571-272-2726. The examiner can normally be reached on M-F 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2852

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan D. Walsh
Patent Examiner
Art Unit 2852

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized loop at the end.

David Gray
Primary Examiner